CET NEWSLETTER
COLLEGE OF ENGINEERING, TRIVANDRUM
ELECTRICAL AND ELECTRONICS ENGINEERING DEPARTMENT
2022-23

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From the Head of the Department

It gives me great pleasure to present the 2022–23 edition of the Department of Electrical and Electronics Engineering Newsletter of the College of Engineering Trivandrum. This issue highlights the major achievements, events, and research milestones of the department during the academic year 2022. Our department continues to uphold a legacy of academic excellence and innovation. The students and faculty have showcased commendable initiative in advancing research, organizing technical events, and fostering collaboration through IEEE and other professional societies. The various workshops, hackathons, and seminars held this year stand as a commitment towards practical learning and community engagement. I extend my heartfelt congratulations to all students, faculty members, and volunteers who contributed to the success of these initiatives. May this publication serve as a reminder of our shared pursuit of excellence and inspire future endeavors in engineering and technology.

Dr. Lal Priya P S

Head of the Department, EEE

College of engineering, Trivandrum

Vision and Mission of the Institute

Vision

National Level Excellence and International Visibility in Every Facet of Engineering Research and Education.

Mission

- To facilitate quality transformative education in Engineering and Management.
- To foster innovations in technology and its application for meeting global challenges.
- To pursue and disseminate Quality Research.
- To equip, enrich and transform students to be Responsible Professionals for better service to humanity.

Vision and Mission of the Department of Electrical Engineering

Vision

Be a centre of excellence and higher learning in Electrical Engineering and allied areas.

Mission

- To impart quality education in Electrical Engineering and bring-up professionally competent engineers.
- To mould ethically sound and socially responsible Electrical Engineers with leadership qualities.
- To inculcate research attitude among students and encourage them to pursue higher studies.

Department Highlights – 2022

IEEE SB CET Activities

IEEE SB CET conducted a variety of impactful events and workshops throughout 2022, focusing on technical learning, professional development, and student engagement. The following are the major highlights of the year:

MD SESSION

An online membership development session was held on 26th January 2022 by Ms. Surabhi Rajesh, MDC, IEEE LINK, to introduce students to IEEE membership benefits and opportunities.

IN-SIGHT–Inaugural Ceremony of IEEE SIGHT SB CET

Launched on 25th January 2022, this event marked the beginning of IEEE SIGHT SB CET's activities focusing on technology-based social impact projects.

AURA 2022

Conducted on 11th May 2022 at CETAA Hall, the event guided first and second-year students through interactive talks and games, highlighting the benefits of IEEE membership.

Workshop on 'First Aid in Electric Shock'

Conducted on 7th May 2022 as part of TESLA'22, promoting safety awareness among students.

Workshop on Sustainable Design for Residential Systems

Held on 4th May 2022, emphasizing renewable energy integration and eco-friendly engineering solutions.

IEEE PES Day Debate Competition

Organized on 9th May 2022, in collaboration with Talk Room Community CET, on the topic 'Sustainable Engineering & Renewable Energy'.

Workshop on Flutter App Development

Held on 29th April 2022, providing students with a hands-on introduction to mobile app creation.

LT Spice Simulation Workshop

Conducted online on 28th July 2022 by IEEE PES SBC CET in collaboration with IEEE PES MEA SBC, followed by a simulation competition on 30th July.

Hack-A-Week

A week-long online project development event exclusively for women, held from 18th to 25th November 2022, mentoring over 100 teams in project development.

Travancore Hub Meet 2022

Hosted on 10–11 December 2022 at CET, this flagship IEEE Travancore Hub event included workshops, cultural events, and networking sessions.

Cyber Security and Ethical Hacking Workshop

A two-day hands-on event conducted as part of Dhrishti'22 in collaboration with Techbyheart, introducing students to cyber security fundamentals.

Voice-Controlled Bot Workshop (NOVA)

Organized on 19th–20th November 2022 by IEEE PES SBC CET and IEEE RAS SBC CET, focusing on Arduino programming and robotics basics.

Student Research and Achievements – 2022

Students of the EEE Department showcased significant research contributions in 2022, presenting their innovative work in international conferences and reputed journals.

1. Improving Distance Relay Performance for Heavily Distorted Voltage and Current by Accurate Signal Reconstruction using Extended Kalman Filter

Authors: Shivani H Nair, Devika M K, Aswin Raj, Bensen Bernard,Vinod V, and Sunil Kumar P R Published in Measurement Science and Technology, Volume 34, February 2023.

2. Analysis and Implementation of Deep Convolutional Neural Network Models for Intelligent Driver Drowsiness Detection System

Authors: Anirudh Suresh, Ankita S Naik, Arya Pramod, N Ashwin Kumar, and N Mayadevi Presented at the 7th International Conference on Intelligent Computing and Control Systems (ICICCS),May2023.

Women in Engineering and Outreach Activities – 2022

IEEE WiE AGCET and IEEE PES SBC CET collaboratively organized multiple initiatives promoting women's participation in technology and community welfare.

Pragti – The Girl Creator

A two-week-long project development program aimed at introducing girl students to project-based learning, culminating in a success meet showcasing innovative hardware prototypes.

Women Empowerment Workshop for Housewives

Held on 6th August 2022 in association with the IEEE Education Society Kerala Chapter, empowering local women with basic tech literacy and online transaction awareness.

Virtual Treasure Hunt (WiE Week)

Organized on 28th May 2022 in collaboration with multiple IEEE WIE AGs, encouraging teamwork and engagement among women members.

All these initiatives reflect the department's commitment to inclusive learning, innovation, and social responsibility.

Achievements of Students during the Academic Year 2022–2023

Abhiram P. K. secured first prize in the Fashion Show Competition held at DHANAK, IIST Trivandrum.

Abhiram A. and Abhishek A. S. participated in Ardinnovate, the tech fest conducted by IIT Palakkad, where Abhishek A. S. achieved third position.

Aparna P. B., Indrajith S., Jayakrishnan P., Muralikrishnan T. P., Shilpa S. Kumar, Nivedma, Sreekumar P. S., Sneha M., Anumol U. S., G. L. Gokulkrishnan, and Rohan Damodar S. participated in the Workshop on Self-Driving Electric Vehicles organized by Techmaghi at IIT Kharagpur.

Muhammed Rahib P. K. attended a workshop on Basics of AutoCAD and SketchUp at IIT Kharagpur.

Rohan Damodar S. also took part in an Industrial Visit, a Workshop on Adobe Premiere Pro, a UI/UX Bootcamp, and developed a project on tracks using Figma organized by TinkerHub, Cochin.

Sidharth K and Soney John participated in a Project Management Workshop at NIT Calicut and a Hands-on EV Workshop conducted by Sign Eminent Enterprises.

Anumol U. S. and Sneha M. participated in a Lecture on AI-Driven Value Chain in Retail Intelligence organized by NIT Calicut.

Jeharsha M. completed an Electric Vehicle Development Internship under Techmaghi.

Mohammed Aslam Saidummadath completed a Networking Essentials program conducted by Cisco.

Shafafathima K. P. also attended a session on AI-Driven Value Chain in Retail Intelligence at NIT Calicut.

Sradha M. represented the department in the Singapore Autonomous Underwater Vehicle Challenge (SAUVC) organized by IEEE.

Ajith C. C. and Adarsh E. participated in Chess Competitions conducted by NSS as part of their events and blood camp initiatives.

Aravind M. S. took part in Tarang '22 and secured second position in UDAAN 1.0 at NIT Calicut.

Devika B. completed an online internship at Code Clause under Alphasys 3D Printing Solutions, Muvattupuzha.

Gopika Dershini S. received a Performance Certificate in the 'Open Rocrect Workshop and Competition' organized by the ISTE CET Students Chapter.

Joachim B. Kattookaran represented KTU Trivandrum as a member of the 10 m Shooting Team in the All-India Inter-University Shooting Tournament hosted by Swami Vivekanand Subharti University.

Pranav M. participated in the Smash Volleyball Tournament (RITU '23) held at RITU, Kottayam.

Sarang T. K. secured third position in the Vogue Conclave during Dyuti 2022, hosted by GEC Thrissur.